AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for reducing radar cross section of an antenna arrangement, ~~characterized by~~ comprising:

~~the step of~~ dynamically controlling an impedance load of the antenna arrangement to thereby reduce scattering of a signal from an external source irradiating the antenna arrangement, wherein dynamically controlling of the impedance load includes changing ~~will be changed~~ a reflection coefficient of the antenna arrangement;

- fully matching the impedance load of the antenna arrangement during a transmit period including a transmit pulse from the antenna arrangement,
- ~~and~~ obtaining at least a trade-off matching of the impedance load of the antenna arrangement during a defined receive period, and
- providing a very poor matching of the impedance load of the antenna arrangement ~~whereby,~~ during ~~the~~ an inactive time ~~remaining~~ period excluding the transmit and receive periods,

wherein the antenna arrangement ~~will present~~ presents a low radar cross section ~~by having~~ during said inactive period ~~a very poor matching~~ with a correct phase in an operating frequency band.

2. (Original) The method according to claim 1, characterized by the further steps of:

triggering, at non periodic intervals, the dynamically controlled impedance load of the antenna arrangement by a transmit pulse to obtain a full frequency matching and thereby a low power loss during the transmit pulse; and

triggering, at non-periodic intervals corresponding to a desired range gate, the dynamically controlled impedance load to a trade-off matching for reception of echoes at a desired distance, actively reducing undesired scattering from the antenna arrangement during all other periods.

3. (Original) The method according to claim 2, characterized by the further step of:

generating the dynamically controlled impedance by means of at least one controlled inner tuning device by controlling the inner tuning device during transmit and receive periods as well as during the period when not actively transmitting or receiving.

4. (Currently amended) The method according to claim 3, characterized by the further step of:

creating the inner tuning device by the use of a switched impedance arrangement ~~(10)~~ being appropriately switched to fully or partly conducting during respective phases of operation and a proper part of the impedance arrangement being non-conducting during the rest of the time.

5. (Currently amended) The method according to claim 3, characterized by the further step of:

creating the inner tuning device by means of an impedance arrangement ~~(10)~~ having a portion with at least one diode which is forward biased during at least a transmission phase, and a second portion ~~(12)~~ of the impedance arrangement being forward biased during the rest of the time.

6. (Original) The method according to claim 3, characterized by the further step of:

creating an inner tuning device by means of an impedance arrangement being at least one gas discharge tube ignited by the transmit pulse.

7. (Currently amended) The method according to claim 1, characterized by the further steps of:

creating by means of the impedance load of the antenna arrangement a first state being fully matched for transmission, a second state being "trade-off matched" for reception providing a lower antenna radar cross section and a third state with the antenna being "closed" providing a lowest possible radar cross section of the antenna when not in use.

8. (Currently amended) ~~A dynamic~~ An antenna arrangement for reducing radar cross section, ~~characterized in~~ comprising:

an antenna in a radar installation,

an impedance arrangement connected to the antenna, and

a control unit, connected to the impedance arrangement, ~~which~~ for ~~dynamically controls~~ changing an impedance load of the antenna arrangement to thereby reduce scattering of a signal from an external source irradiating the antenna arrangement,

wherein the control unit is configured to change the impedance load of the antenna arrangement by changing a reflection coefficient of the antenna arrangement between:

fully matching the impedance load of the antenna arrangement during a transmit period including a transmit pulse originating from a transmitter in the antenna arrangement,

a trade-off matching the impedance load of the antenna arrangement during a defined receive period in the antenna arrangement, and

a poor matching of the impedance load of the antenna arrangement during an inactive time period excluding the transmit and receive periods~~is changed to fully match the impedance load during a transmit pulse and producing at least a trade-off matching during a defined receive period, whereby during the remaining time~~ that causes the antenna arrangement ~~presents~~ to present a low radar cross section ~~by choosing the impedance in an appropriate manner~~ during said inactive period.

9. (Currently amended) The ~~dynamic~~ antenna arrangement according to claim 8, characterized in that the ~~dynamically~~ controlled impedance load is ~~triggered~~triggerable, at non periodic intervals, by a transmit pulse to obtain a full frequency matching and thereby a low power loss during the transmit pulse, and

the ~~dynamically~~ controlled impedance load is ~~triggered~~triggerable, at a desired range gate, to at least a trade-off matching for reception of echoes at a desired distance, to ~~thereby~~ actively reduce undesired scattering from the antenna arrangement during reception and reducing radar cross section of the antenna during inactive periods of~~when~~ no transmission or reception.

10. (Currently amended) The ~~dynamic~~ antenna arrangement according to claim 9, characterized in that the ~~dynamically~~ controlled impedance ~~is formed by means of~~ includes at least one controlled inner tuning device ~~which can be controlled~~ controllable during transmit and receive periods as well as during a period of not actively transmitting or receiving.

11. (Currently amended) The ~~dynamic~~ antenna arrangement according to claim 10, characterized in that the inner tuning device ~~is formed by~~ includes at least one switched impedance arrangement ~~(10)~~ which can be switched to fully or partly conducting during respective phases of operation and can be switched to a state closing the antenna during the rest of the time.

12. (Currently amended) The ~~dynamic~~ antenna arrangement according to claim 10, characterized in that the inner tuning device forming the impedance arrangement ~~(10)~~ ~~is~~ includes at least one diode, which is biased forward during an active phase of operation and being back-biased during the rest of the time.

13. (Currently amended) The ~~dynamic~~ antenna arrangement according to claim 10, characterized in that the inner tuning device forming the impedance arrangement ~~is~~ includes at least one gas discharge tube being ignited by the transmit pulse.